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NASA Export Control Program

Responsible Office: Office of International and Interagency Relations

NASA Export Control Program Operations Manual

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Table of Contents

Preface

- P.1 Purpose
- P.2 Applicability
- P.3 Authority
- P.4 Applicable Documents and Forms
- P.5 Measurement/Verification
- P.6 Cancellation

Chapter 1. Introduction

- 1.1 General

Chapter 2. General Export Control Responsibilities for NASA Personnel

- 2.1 General
- 2.2 NASA Associate Administrator for the Office of International and Interagency Relations (AA/OIIR)
- 2.3 NASA Headquarters Export Administrator (HEA)

- 2.4 NASA Officials-in-Charge of Headquarters
- 2.5 NASA Headquarters Export Counsel (HEC)
- 2.6 NASA Headquarters Program and Project Managers
- 2.7 NASA Headquarters Manager, Transportation Programs
- 2.8 Center Directors
- 2.9 Center Export Administrators (CEA)
- 2.10 Center Export Counsel (CEC)
- 2.11 Center Project Managers
- 2.12 Export Control Representatives (ECR)
- 2.13 Center Transportation Officers (TO)
- 2.14 Center Property Disposal Officers (PDO)
- 2.15 Export Control Staff (ECS)

Chapter 3. NASA Export Control Process

- 3.1 General
- 3.2 Commodity Jurisdiction (CJ) and Classification
- 3.3 Foreign Partner or End-User Credentials
- 3.4 License Requirements
- 3.5 Technology Transfer Control Plans (TTCP)
- 3.6 Recordkeeping
- 3.7 Reporting
- 3.8 Information Security and Electronic Transmission

Chapter 4. International Traffic in Arms Regulations (ITAR) Procedures

- 4.1 General
- 4.2 Imports
- 4.3 Procedures for Determining ITAR License Requirements and License Exemption Eligibility
- 4.4 License Exemptions

Chapter 5. Export Administration Regulations (EAR) Procedures

- 5.1 General
- 5.2 License Exceptions
- 5.3 Screens

Chapter 6. NASA Export Control Program Education and Training

- 6.1 General
- 6.2 Training Program

Chapter 7. NASA Export Control Program Auditing

7.1 Purpose

7.2 Auditor Selection

7.3 Auditor Duties and Responsibilities

7.4 Final Report

Chapter 8. Questions of Compliance and Violations

8.1 General 8.2 Voluntary Disclosure 8.3 Violations

Appendix A. Definitions

Appendix B. References

Preface

P.1 Purpose

This NASA Procedural Requirements (NPR) document provides instructions and requirements for implementation of NASA Policy Directive (NPD) 2190.1 NASA Export Control Program (ECP). Specifically, this NPR provides requirements, instructions, and responsibilities for all NASA employees and NASA support contractors engaged in activities that involve the transfer of commodities, software, technical data, technology, defense services, and/or technical assistance to foreign entities. The Export Control Operations Manual -- NAI 2190.1 provides more detailed instruction and guidance on implementing the requirements of this document.

P.2 Applicability

- a. This NPR is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This language applies to the Jet Propulsion Laboratory (JPL), other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statement containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.

P.3 Authority

NPD 2190.1, NASA Export Control Program.

P.4 Applicable Documents and Forms

- a. Arms Export Control Act, as amended, 22 U.S.C §§ 2778, et seq.
- b. Export Administration Act, as amended, 50 U.S.C §§ 2401 et seq.
- c. 15 CFR pts. 730-774, Export Administration Regulations.
- d. 22 CFR pts. 120-130, International Traffic in Arms Regulations.
- e. 27 CFR § 447.53, Exemptions.
- f. NPR 1441.1, NASA Records Retention Schedules.
- g. NAI 2190.1, NASA Advisory Implementing Instruction.
- h. Form DSP-73, Application/License for Temporary Import of Unclassified Defense Articles.
- i. Form DSP-5, Application/License for Permanent Export of Unclassified Defense Articles and Related Unclassified Technical Data.

- j. Form DSP-83, Non-transfer and Use Certificate.
- k. Form DSP-85, Application for Permanent/Temporary Export or Temporary Import of Classified Defense Articles and Related Classified Technical Data.
- l. Form DSP-61, Application/License for Temporary Import of Unclassified Defense Articles.
- m. BIS Form 748P, Export License Application.
- n. BIS Form 711, Statement by Ultimate Consignee.
- o. ISO 9000, International Standards Organization Certification.

P.5 Measurement/Verification

Adherence to this policy will be measured by whether exports are executed in a timely manner sufficient to meet NASA program objectives, by the extent to which NASA exports are compliant with U.S. laws and regulations, and by annual reviews conducted by the Center Export Control Auditors (ECA).

P.6 Cancellation

NPR 2190.1, NASA Export Control Program, dated April 10, 2003.

Chapter 1. Introduction

1.1 General

1.1.1 This NPR provides basic procedures and requirements for fulfilling NASA's obligation to comply with all U.S. export control laws and regulations in its transfers of commodities, software, technical data, technology, and/or defense services, and/or technical assistance to foreign parties (including foreign contractors or U.S. person representatives of foreign persons) in the course of approved international activities. It is the responsibility of every NASA employee to comply with U.S. export control laws and regulations. The NASA Headquarters Export Administrator (HEA), the Associate Administrator for International and Interagency Relations, the NASA General Counsel, the Mission Directorate Associate Administrators and the Mission Support Associate and Assistant Administrators, the Headquarters' Officials-in-Charge, Center Directors, Center Chief Counsel, Center Export Administrators (CEAs), the Headquarters and Center Export Counsel (HEC/CECs), Export Control Representatives (ECR), Center Export Representatives (CER), Export Control Points of Contact (EC-POC), the NASA Program/Project Managers, the Contracting Officers (CO), the Grant Officers (GO), and Contracting Officers' Representatives (COR), and the Transportation Officers (TO) are the key personnel charged with ensuring NASA's adherence to those laws and regulations.

1.1.2 Questions regarding the execution of responsibilities set forth in this NPR are to be directed to the HEA. Suggestions for improvements in the content of this NPR are welcome and should be made in writing to the attention of the NASA HEA, Office of International and Interagency Relations, NASA Headquarters, Washington, DC 20546. A flow chart of the steps and considerations to be undertaken before implementing an export is found in NAI 2190.1c.

1.1.3 An effective compliance program shall provide adequate staffing and resources to address: policy, licensing, compliance, training, information technology systems, and procedures.

Chapter 2. General Export Control Responsibilities for NASA Personnel

2.1 General

2.1.1 Export Control transactions are regulated by export control laws in order to protect U.S. national security interests and to further U.S. foreign policy objectives. These are primarily codified in the International Traffic in Arms Regulations (ITAR) and the U.S. Export Administration Regulations (EAR) that are administered by the Departments of Commerce and State, respectively. NASA's ECP is an Agency-wide (Headquarters and Centers) system established to ensure that exports and transfers to foreign parties comply with regulatory requirements, while maximizing the benefits of the Agency's international efforts. The program is based on a "corporate" philosophy that says: "We want to maximize the benefits of our international efforts while ensuring that we comply with U.S. export control laws and regulations." This is the personal responsibility of each employee. It is a tangible expression of the Agency's statutory mandate and mission in the responsible pursuit of appropriate international activities involving transfers of commodities, software, technical data, technology, and/or defense services, and/or technical assistance. ECP is the mechanism within the Agency that provides checks and safeguards at key steps in program development and implementation to help manage international activities. Absent an effective ECP, NASA and its employees risk running afoul of the ITAR and EAR, which may result in criminal, civil, or administrative enforcement actions against NASA, individual employees, and/or private contractors.

2.1.2. The NASA Administrator is responsible for the Agency's overall compliance with export control laws and regulations and has delegated authority to the Associate Administrator for the Office of International and Interagency Relations to administer execution of this program. Center Directors and senior management across the Agency are responsible for providing the program with appropriate resources, oversight and management support, as required to ensure compliance at their locations.

2.1.3. In principle, exports or transfers of export-controlled items (including transfers of commodities, software, technical data, technology, and/or defense services, and/or technical assistance ITAR and EAR) will not be made to any foreign entity under any NASA program unless the exporter is confident that such exports or transfers are in conformity with approved contracts or agreements (usually international agreements) and U.S. export control laws and regulations, as delineated in 22 CFR pts. 120-130 and 15 CFR pts. 730-774. Further, NASA exports to foreign entities will only be conducted in furtherance of NASA agreements or contracts, when there is a mission requirement and an appropriate export authorization can be used. NASA publication of technical data and software are appropriate when effected in accordance with NASA policies. Consultation with the NASA HEA, appropriate CEA, or counsel is required whenever there is doubt as to whether a proposed export or transfer is consistent with this general principle.

2.2 NASA Associate Administrator for the Office of International and Interagency Relations (AA/OIIR)

2.2.1. The Associate Administrator for the Office of International and Interagency Relations

(AA/OIIR) is responsible for the formulation and execution of the Agency export control program and international technology transfer policy, which includes requirements to:

- a. Assure written appointment of a NASA Headquarters Export Administrator (HEA) to serve as Agency empowered official. Additional empowered officials may be designated, as needed.
- b. Provide appropriate resources (personnel, information technology, and funding) to develop and maintain a sound Agency export compliance program and periodically review resource requirements.

2.3 NASA Headquarters Export Administrator (HEA)

2.3.1 Upon written appointment, the HEA serves as NASA's primary Empowered Official, with authorities cited in 22 CFR 120.25 and is responsible for assessing and ensuring that all NASA program export activities comply with U.S. export control laws and regulations.

2.3.2 The HEA is also NASA's policy and licensing liaison with the U.S. Government's export control community. In performance of these duties, the HEA shall:

- a. Maintain a high level of expertise of current ITAR and EAR provisions and requirements applicable to NASA programs.
- b. Approve and maintain necessary NASA authorization documentation regarding specific exports pursuant to NASA programs that are subject to the ITAR and EAR. Coordinate and submit all Commodity Jurisdiction (CJ) requests, Advisory Opinions (AO), Voluntary Disclosures, General Correspondence (GC), classification requests and export and/or reexport license applications.
- c. Serve as the NASA Headquarters point of contact for the Department of Commerce's (DoC) Bureau of Industry and Security (BIS), the Department of State's (DoS) Directorate of Defense Trade Controls (DDTC), the Department of Defense's (DoD) Defense Technology Security Administration (DTSA) and Department of Energy (DOE), the Department of Homeland Security, the Department of Justice Federal Bureau of Investigation, and other appropriate agencies for all international technology transfer/export control issues.
- d. Manage NASA's annual ECP internal audits, including providing annual audit guidance to Centers, receiving, and reviewing audit reports. See Chapter 7: NASA Export Control Program Auditing.
- e. Serve as the NASA Headquarters point of contact for NASA Headquarters program executives, and work with the NASA CEAs concerning issues at Centers. Coordinate with appropriate NASA officials on export control matters affecting NASA programs. When the HEA, in consultation with these officials, determines that a proposed export or transfer would not be in conformance with the ITAR and EAR, the HEA has the authority to suspend such activity pending resolution with the concerned offices or agencies.
- f. Attend, at least annually, export control-related training and coordinate the annual NASA Export Control Program Review. Provide additional periodic training to NASA Headquarters and Center officials, as requested or needed. Develop and maintain export control training modules on SATERN.
- g. Develop, in consultation with appropriate NASA offices and officials, the NASA position on

missile technology proliferation issues, and participate in interagency organizations and meetings concerning missile technology transfers and proliferation as the NASA representative.

- h. Manage export control input to the NASA Identity Management System for access to NASA facilities by foreign persons.
- i. Obtain the participation of appropriate NASA offices and officials in training and in interagency reviews and assessments conducted by and with the Departments of State, Commerce, Defense, Treasury, and other appropriate agencies concerning technology transfers, export controls, missile technology proliferation, or other related matters affecting NASA programs.
- j. Ensure the completion and maintenance (recordkeeping) of necessary license, license exemption, or license exception documents regarding specific transfers, pursuant to Headquarters programs, which involve exports or transfers subject to the ITAR and EAR. For exports of defense articles under ITAR license exemptions, copies of all correspondence required by ITAR exemptions, will be maintained as required.
- k. Develop and issue export compliance policies and regulation interpretations for NASA to the CEAs.
- l. Support import activities for NASA programs. Initiate and coordinate discussions with other regulatory departments and agencies for the import of products in support of NASA programs.
- m. Review and concur on Headquarters program management designation of programs as fundamental research (see NAI 2190.1).
- n. Review and approve the use of export license exemptions and exceptions. This authority may be delegated to CEAs in the determination of the HEA, as warranted.
- o. Provide an export control review of NASA scientific and technical data prior to publication, and determine if the data should be export-controlled. Participate in reviews of export-controlled data requested under the Freedom of Information Act (FOIA).
- p. During the Annual Program Review, solicit and collect concerns and issues from CEAs and Center export personnel, organize and distribute a listing of these concerns, and track and report progress on resolving these issues.
- q. Serve as the CEA for Headquarters as a Center.
- r. Serve as the CEA for the NASA Management Office (NMO) at the JPL, a Federally Funded and Research Development Center (FFRDC), in the absence of a formally appointed CEA at the NMO and otherwise assist the NMO in administering the NASA/Caltech contract in the area of export control.

2.4 NASA Officials-in-Charge of Headquarters

2.4.1 The NASA Officials-in-Charge of Headquarters are responsible for ensuring that programs and projects within their organizations comply with all U.S. export control laws and regulations and the NASA ECP.

2.4.2 The NASA Officials-in-Charge of Headquarters (e.g. Administrator Staff Offices, Mission Directorates, and Mission Support Directorates) should appoint a member of their staff to act as the

export control point of contact (EC-POC) for the ECP. The EC-POC will coordinate responses and provide a conduit for sharing the export control-related information.

2.5 NASA Headquarters Export Counsel (HEC)

2.5.1 The HEC is appointed by the General Counsel and is responsible for providing legal guidance to the HEA in NASA export control matters pursuant to the ITAR and EAR.

2.5.2 The HEC shall perform the following duties:

- a. Assist the HEA in reviewing specific exports and transfers under NASA programs.
- b. Serve as the NASA Headquarters point of contact for the Center Export Counsel on legal matters.
- c. Assist the HEA with export control review and publication clearance for NASA patent applications.
- d. Keep abreast of statutory and regulatory developments in the U.S. export control system.
- e. Review annual audits.
- f. Review voluntary disclosures.
- g. Attend Annual NASA Export Control Program Reviews

2.6 NASA Headquarters Program and Project Managers

2.6.1 NASA Headquarters program/project managers will maintain oversight of NASA-directed contractor export activities, including concurrence on the use of NASA-authorized Exemptions and Exceptions and use of NASA-obtained licenses. Program and project managers can request, from NASA contractors or NASA transportation activities, copies of Automated Export System (AES) filings and export licenses submitted in support of NASA programs. NASA's use of ITAR exemptions or EAR exceptions requires the approval of the HEA/CEA and compliance with reporting and recordkeeping requirements. Program and project managers overseeing programs with international partners must address the responsibilities set forth in Sections 2.6.1a-j. Specifically, program and project managers shall:

- a. Consult with HEA/CEA early in program development to determine the export-control classification of items and/or data, then document that information in the program/project plans, in applicable property accountability records, and prior to releasing property to the Property Disposal Officer (PDO). Understanding export-control classification of items and technical data to ensure that export-control matters are considered and resolved in advance of prospective shipment or transfer dates is essential. Export-controlled technical data will be marked, as such, prior to transfer to international partners. Early collaboration with Export Administrators in a project life cycle (preferably prior to mission definition review) is essential to identify and assess export-controlled items and technical data that may require access by international partners.
- b. Include export-control compliance planning and export-control milestones in programs with international partners.
- c. Develop appropriate safeguards for commodities, technologies, and software exported or

transferred pursuant to international agreements or contracts. All controlled technical data or commodities will be marked or identified in accordance with the Transfer of Goods and Technical Data Clause of the relevant international agreement or in accordance with the Transfer of Goods and Technical Data Clause of the relevant contract. When necessary and appropriate (and with the concurrence of the HEA and HEC), non-disclosure agreements (NDAs) will be used when foreign nationals are provided export-controlled technical data or commodities outside the scope of an international agreement or contract.

d. Provide the necessary technical information to the HEA to determine the need for validated export licenses or other documentation in specific activities and for the completion of such documentation, where necessary.

e. Document requirements for exports or transfers of technical data to foreign persons and ensure that requirements are reflected in relevant international agreements, contracts, or technology transfer control plans that support a program or project.

f. Develop a Technology Transfer Control Plan (TTCP). A TTCP is recommended for all NASA programs and projects with international participation and can be referenced when hosting foreign persons at NASA facilities.

g. Encourage export-control training for program/project personnel working with foreign persons and directing the work of others on the project. All personnel will participate in basic export control awareness training either via NASA's Systems for Administration, Training and Educational Resources for NASA (SATERN) or through on-site briefings or outside forums.

h. Work with the HEA to determine the export-control classification of NASA hardware prior to disposal of that hardware.

i. Ensure contracts require contractors to mark documents for export control purposes on creation and classify hardware prior to delivery.

j. Ensure export-control documents are appropriately marked with the export classification upon creations.

2.7 NASA Headquarters Manager, Transportation Programs

The NASA Headquarters Manager, Transportation Programs, shall, in consultation with the HEA, ensure that all exports and transfers of commodities, technical data, and software, as well as technical assistance and defense services are accompanied by appropriate and accurate export-control documentation, including validated licenses (if required), commercial invoice documents (with item classification, export authorization and destination control statement), marking statements or other authorizing documents, as needed. The manager will serve as the point of contact for the HEA on NASA transportation policies and practices.

2.8 Center Directors

2.8 Center Directors are responsible for ensuring that all projects under their purview comply with U.S. export control laws and regulations and this NPR. Center Directors shall:

a. Provide written appointment of a senior-level person as their Center Export Administrator (CEA),

at a grade of no less than the GS-15. Appointments of CEAs require prior coordination with the HEA. The CEA will report directly to the Center Director or one of their direct report designees and the CEA's other responsibilities will not conflict with the duties of the CEA. Center Directors will seek input from the HEA for the annual performance rating of the CEA.

b. Designate a qualified individual as an Export Control Auditor (ECA) to annually review the operation of the NASA Export Control Program at their Center, in accordance with NPD 2190.1 and Chapter 7 of this NPR. Appointments of ECAs should be reported to the HEA within 30 days.

c. Ensure the completion of annual Export Control Program audits and confirm implementation of corrective measures or progress of those measures to the Associate Administrator for International and Interagency Relations and to the HEA.

d. Review Export Control Program resource requirements periodically and provide appropriate resources to ensure effective program management and compliance.

2.9 Center Export Administrators (CEA)

2.9.1 The CEA is responsible for assessing and ensuring compliance of all Center program activities with U.S. export control laws and regulations. Specifically, the CEA shall:

a. Serve as the Center resident expert on all matters related to export control and international technology transfer and serve as the principal Center point of contact between the Centers and the HEA. The CEA is encouraged to establish a network of Export Control Representatives (ECR) or Center Export Representatives (CER), or Export Control Points of Contact (EC-POC) within Center directorates or programs to assist with export determinations and reviews.

b. Maintain a thorough knowledge of current export control provisions and requirements and all relevant NASA NPD/NPR requirements applicable to Center programs and activities and assist in developing Center policy and procedures.

c. Ensure the completion and maintenance (recordkeeping) of necessary licensing and/or license exemption or exception documents regarding specific transfers, pursuant to Center programs which involve exports or transfers subject to the ITAR or EAR. For exports of defense articles under ITAR license exemptions, provide copies of all correspondence to the HEA within 30 days of export.

d. Support and participate in the Center review process for approving foreign person visitors and hires, providing advice and guidance to the Center International Visit Coordinator and to the program and project personnel who serve as sponsors for such visitors and hires, and provide assistance in the development of appropriate TTCPs.

e. Identify the need for and promote the appointment of ECRs (e.g. ECRs, CERs, or EC-POCs). Assist, train, and oversee ECRs (e.g. ECRs, CERs, or EC-POCs), if appointed.

f. Assist program and project personnel in determining the appropriate export controls for publishing and disseminating Scientific and Technical Information (STI). CEAs, or their designated representative, are required to sign Block 8, Export Control Review/Confirmation, on NASA Scientific and Technical Document Availability Authorization (DAA). The signature may be on the hardcopy document or via the approved electronic DAA review system. CEAs participate in reviews of export-controlled data requested under the FOIA.

- g. Assist Center Contracting Officers (COs), Contracting Officer's Representatives (CORs), and Grant Officers in procurement-related matters involving export control; e.g., responding to contractor export questions and requests, drafting of ITAR exemption authorizations and EAR exception authorizations for use by contractors, drafting of appropriate clauses in NASA solicitations and contracts, and reviewing NASA draft solicitations as requested. Review and concur on all Center designation of tasks as fundamental research (See NAI 2190.1 for requirements regarding fundamental research designation).
- h. Assist the Center Chief Information Officer (CIO) in effecting NASA and local policy on placing information on NASA Web sites.
- i. Assist the Center Software Release Authority in determining export control restrictions.
- j. Coordinate with CECs, Transportation Officers, ECRs (e.g. ECRs, CERs, or EC-POCs), and program/project managers on export control matters affecting Center programs and activities.
- k. Advise Center Transportation Officers on questions related to international shipments (including imports of foreign-origin commodities). When the CEA, in consultation with these officials, determines that a proposed export or transfer would not be in conformance with NASA policy, the ITAR, or the EAR, the CEA will have the authority to suspend or stop such activity, pending resolution with the concerned offices or agencies.
- l. Attend the annual NASA Export Control Program Review and at least one other export control training session annually, establish an annual Center training plan for Center personnel, and arrange for, or provide, training.
- m. Review and consult with the HEA or Headquarters Export Control Staff (HQ ECS) on all Center commodity jurisdiction, classification, and licensing requests for Center projects. After local approval, route those requests to the HEA for formal transmittal to, and processing by, BIS or DDTC.
- n. Serve as the interface with the HEA or HQ ECS for review and comment on contractor-requested export license applications related to NASA/Center programs/projects. The purpose of a review is to:
 - (1) Determine if the industry applicant is accurately representing the NASA program and NASA involvement.
 - (2) Determine if the work is being done under a NASA international agreement or with an industrial contractor of the NASA foreign partner.
 - (3) Determine if an exemption or exception applies for exports in accordance with an international agreement.
 - (4) Verify that NASA contract direction to industry is within the scope of the license activities.
 - (5) Determine any feedback or reporting requirements the program desires to add to the license conditions.
- o. Serve as the interface with the HEA or HQ ECS for review and comment on the Committee on Foreign Investment in the United States (CFIUS) cases related to Center programs or NASA contracts.

- p. Serve as the Center export control point of contact for General Accountability Office (GAO) and Inspector General (IG) audits related to export control matters.
- q. Periodically disseminate export control information and guidance to appropriate Center personnel.
- r. Review and ensure Center follow-up and closeout on recommendations from the annual NASA Export Control Program audit and on GAO and IG audits related to export control.
- s. Establish contacts with Center contractors involved in Center programs with international content to share information and to work issues related to licenses and/or granting or use of NASA-authorized ITAR exemptions.
- t. Assist the International Space Station (ISS) program and other NASA programs in performing EAR-required audits and reviews of NASA contractors authorized to use any BIS-approved NASA International Cooperative Licenses (ICL).
- u. Assist CEC with export control review and publication clearance for NASA patent applications.
- v. Assist project personnel in determining the export-control jurisdiction of items to be declared excess and support the PDO in conducting audits of Center property disposition and export control activities, as necessary.
- w. Maintain electronically, or in hardcopy, a reference library of relevant policies, regulations, and, to the maximum extent practicable, the international agreements governing the programs and projects for which exports and transfers are required.
- x. Work with Center program managers, facilities managers, counterintelligence professionals, and Center Protective Services personnel to identify key technologies and catalog those key technologies at each Center. Each Centers' catalog will be forwarded to the HEA for inclusion into the NAI 2190.1, or other designated repository. The CEA will maintain and update the Center information, as necessary.

2.10 Center Export Counsel (CEC)

2.10.1 The CEC is appointed by the Center Chief Counsel and is responsible for providing legal guidance to the CEA in NASA export control matters under the ITAR, the EAR, and other applicable regulations. The CEC shall:

- a. Assist the CEA in reviewing specific exports and transfers under NASA programs and with export control review and publication for NASA Patent Applications.
- b. Assist the CEA in validation of Exemption and Exception use determinations, as necessary.
- c. Keep abreast of statutory and regulatory developments in the U.S. export control system.
- d. Guide the CEA in appropriate interpretation and implementation of export control laws and regulations. Consult with HEC to ensure Agency-wide consistency of interpretation.
- e. Review Center annual audits.
- f. Review Center voluntary disclosures.
- g. Attend Annual NASA Export Control Program Reviews

2.11 Center Project Managers

2.11.1 NASA program and project managers shall include "export control milestones" in their program and project plans and should collaborate with CEAs early in a project's life cycle (prior to the mission definition review) to identify and assess export-controlled technical data that will be provided to foreign partners, and other activities, to ensure that export control matters are considered and resolved in advance of shipping or transfer dates.

2.11.2 All NASA Center project managers shall, in consultation with the appropriate CEA, ensure that international activities under their direction include:

- a. Appropriate safeguards for export or transfer of commodities, software, technical data, technology, and/or defense services, and/or technical assistance pursuant to international agreements or contracts. All export-controlled technical data or commodities will be marked or identified, in accordance with the Transfer of Goods and Technical Data Clause of the relevant international agreement, prior to authorized transfer to foreign persons. When necessary and appropriate (and with the concurrence of the CEA, HEA, HEC, and CEC), NDAs will be used when foreign persons are provided controlled technical data or commodities outside the scope of an international agreement or contract.
- b. Necessary technical information to the CEA to determine the need for validated export licenses or other documentation in specific activities and for the completion of such documentation, where necessary.
- c. Adequate lead time for the submission, processing, and receipt of validated export licenses, see NAI 2190.1 for appropriate guidelines.
- d. Oversight of NASA-directed contractor export activities, including concurrence on the use of NASA-authorized exemptions or exceptions, or the use of NASA-obtained licenses, and require that copies of all export records (e.g. AES, Government Bill of Lading (GBL), waybills, invoices) be submitted to NASA. (See Section 3.7 Reporting)
- e. Assurance that NASA only transfers commodities, software, technical data, technology, and/or defense services, and/or technical assistance necessary to fulfill NASA responsibilities under international agreements and contracts. If foreign contracts are anticipated, program and project managers will ensure that there is appropriate Headquarters review and that such contracts are prepared with appropriate export control provisions. Contracts with U.S. industry that support an international program or project will include appropriate provisions related to export control requirements.
- f. Export-control jurisdiction and export classification of commodities, software, technical data, technology, and/or defense services, and/or technical assistance, in consultation with the CEA, and note classification in NASA property databases or tracking forms. Export control jurisdiction of hardware and technical data is an important consideration when reviewing program access by non-U.S. persons. Technical data (documents) that require use of export license, exemption, or exception will be marked as "export controlled."
- g. Designation of work as fundamental research only in consultation with the CEA and CEC as described in NAI 2190.1.

- h. Annual opportunities for NASA export-control training for all program and project personnel; this is especially important if foreign persons are involved or when directing the work of others on the project
- i. Timely review of industry export licenses related to NASA programs and projects. Verify program description and characterization of NASA and contractor involvement. Use timeline guidance timelines in NAI 2190.1 to submit export authorization requests.
- j. A TTCP recommendation for all NASA programs/projects with international involvement. (See Section 3.5 of this NPR for more information about TTCPs.)
- k. Work with the CEA to determine the need for and subsequent appointment of one or more ECRs in the program to provide assistance to a program/project regarding export control matters.
- l. Determine the export classification of items, in consultation with your Center CEA or your ECR, and document that information in the applicable property accountability record.
- m. Ensure all documents and hardware are properly classified for export control purposes prior to transfer or final disposition.

2.12 Export Control Representatives (ECR)

Centers may choose to appoint ECRs (e.g. ECRs, CERs, or EC-POCs) within a directorate organization or program to act as the point of contact with the CEA on all matters concerning export control and international visitor requests to the respective Center. The ECR will maintain working knowledge of the ITAR and EAR, participate in export control training activity annually, and coordinate export issues with the CEA. ECR duties and responsibilities related to export control issues shall be coordinated with the CEA.

2.13 Center Transportation Officers (TO)

2.13.1 NASA TOs at each Center shall, in consultation with the CEA, ensure that all exports and transfers of commodities, software, and technical data under Center programs are accompanied by appropriate and accurate export control documentation, including validated export licenses, commercial invoice documents, marking statements, destination control statements, GBLs, AES filing, or other authorizing documents, as needed, in all appropriate cases.

2.13.2 Exports and transfers required by Headquarters program or project managers will be processed by the Goddard Space Flight Center (GSFC) TO (to include AES filings). The GSFC TO shall consult with the GSFC CEA and the HEA for such Headquarters exports and transfers.

2.14 Center Property Disposal Officers (PDO)

NASA PDOs shall ensure that the export control jurisdiction of NASA hardware is determined prior to its disposal or sale. PDOs can consult with the NASA project manager/owner of the property, the CEA, or the ECR for proper classification of NASA export-controlled property. PDOs should also ensure vetting of individuals that receive these items and provide notice to the recipient of the export-controlled status of the item. Vetting includes verifying U.S. citizenship and checking denied lists via the agency approved method administered by NASA HQ OPS.

2.15 Export Control Staff (ECS)

2.15.1 The Export Control Staff (ECS) consists of civil servants or contractors that directly support the office of the HEA or CEA and facilitate the execution and/or documentation of export compliance activities within NASA.

2.15.2 Examples of ECS responsibilities include preparation or maintenance of:

- a. Export authorization applications
- b. Classification determinations
- c. Foreign visit review and proviso recommendations.
- d. Export control release determinations for NASA documents that will be provided to the public or to specific foreign persons
- e. Export control training products
- f. Export control records or database systems
- g. Export control policy, procedural, or guideline recommendations

Chapter 3. NASA Export Control Process

3.1 General

3.1.1 NASA, as a U.S. Government agency on the leading edge of technological development and international cooperation in space, aeronautics, and a variety of scientific endeavors, is a responsible exporter. The most significant step in any export activity is to determine if the export is necessary and appropriate, from a program standpoint, and in accordance with NASA international policy and with the approved agreement (usually international agreement) or contract. The international agreement's Roles and Responsibilities and Technical Data and Goods clauses provide important guidance on the scope of exports and transfers that are consistent with the relevant program.

3.1.2 In general, NASA is not responsible for contractors' export compliance in the execution of contracted work. The exception is an instance in which NASA directs or authorizes a contractor to effect exports using a NASA-obtained license, a license exemption, a license exception or Government Bill of Lading (GBL).

3.2 Commodity Jurisdiction (CJ) and Classification

3.2.1 Once it has been determined that a planned transfer of export-controlled items (commodities, software, technical data, technology, defense services or technical assistance) to a foreign person is necessary and consistent with NASA policy and the approved agreement, contract or grant, the next step is to establish if the item is listed on the United States Munitions List (USML) or the Commerce Control List (CCL). The USML enumerates the classes of defense articles subject to the licensing authority of the DDTC. The CCL identifies items subject to the licensing authority of the BIS. NASA officials authorized to make this determination include the HEA, CEAs, and experienced ECRs and program and project managers. These individuals can seek advice from manufacturers, engineers, and other qualified, knowledgeable persons to assist in this process. The HEA can also request a CJ determination from DDTC, if doubt about proper jurisdiction persists.

3.2.2 Upon a written CJ request from the HEA, DDTC will, in consultation with the DoD and DoC and other concerned U.S. Government agencies, provide a determination of whether a specific item is covered by the USML.

3.2.3 The ITAR states the basis upon which a commodity determination is made and how jurisdictional disputes may be resolved.

3.2.4 All CJ requests will come through Headquarters. NASA CEAs shall consult with the HEA if questions of jurisdiction arise.

3.2.5 If an item is believed to be under the jurisdiction of the EAR, but the exporter is not able to classify the item on the CCL, a classification request can be submitted to the BIS at the DoC by the HEA.

3.2.6 All NASA classification requests are submitted by the HEA. A complete description of the item, including its intended purpose and all the capabilities the item may have, is required, as well as a suggested Export Control Classification Number (ECCN). BIS will provide a written classification to NASA, which may include limitations and requirement for reclassification if the item is modified

or improved.

3.2.7 With the exception of publicly available technical data/technology or software and fundamental research, virtually all commodities, technical data, and software are subject to the export control regulations. If technology, technical data, or software are publicly available they are not subject to export control.

3.2.8 If the technical data/technology or software is not publicly available or fundamental research, it is classified either under a Category Number on the USML, (See Chapter 4 of this NPR), under an ECCN on the CCL (See Chapter 5 of this NPR), or under EAR99.

3.2.9 Once properly classified on the USML or CCL, the appropriate authorization for export will be determined, whether an applicable license, license exception, or license exemption or other authorization (i.e., General Correspondence under the ITAR). Written HEA or CEA authorization is required prior to use of export authorizations; recordkeeping and reporting requirements apply.

3.3 Foreign Partner or End-User Credentials

3.3.1 In any export activity, it is imperative that the intended end users and their organizations be vetted prior to engaging in cooperative activities or export transactions NASA uses an online screening tool that performs this function as a single point check against multiple database lists for individuals or entities (company, government entity, school, etc.) against all current export control restrictions, sanctions, law enforcement, international terrorist, blocked person, wanted persons, entity lists, and export risk country alerts. However, if manual vetting is done, at a minimum the following lists will be checked to establish end-user (foreign partner or contractor) credentials prior to engaging in cooperative activity or export transactions:

a. Check to ensure that the recipient is not:

(1) A Denied Person.

(2) A Specially Designated National.

(3) A Debarred Party.

(4) An Entity of Concern.

(5) An Unverified entity.

b. Normally, only publicly available information is provided to a recipient identified on the list given in Section 3.3.1a.

c. Ability to provide non-publicly available information is determined by documented requirements, item classification, and appropriate authorization (a license, license exemption, license exception, or other authorization) may be required. Consultation with an HEA or CEA is needed.

3.3.2 Check for red flags. Refer to BIS' Know Your Customer guidance and red flags in EAR. When red flags are raised by the information provided, NASA officials have a duty to check out suspicious circumstances and inquire about the end use, end user, or ultimate country of destination.

3.3.3 Encourage the maximum flow of information concerning the end-use and end user. Do not inhibit the flow of information from potential foreign partners in an effort to prevent the discovery

of adverse end-use, end user, or country of destination. Such actions will not insulate NASA personnel from liability and will likely be considered an aggravating factor in enforcement proceedings.

3.3.4 Reevaluate any discoveries after inquiry. Inquiry and reevaluation are intended to determine whether there are explanations or justifications for discovered "red flags." If they can be justified, consult with the HEA and/or CEA prior to proceeding with the transfer or export. If they cannot be justified, do not proceed.

3.3.5 Consult with the CEA, CEC, HEA, or HEC for guidance. If concerns remain about a particular transfer or export, after inquiry and reevaluation, refrain from the transaction, provide all relevant information to the HEA or CEA, and await their determination. Information about proposed transfer/exports will be shared and evaluated by responsible individuals.

3.3.6 If a U.S. person represents a foreign person (e.g., government entity, corporation, business association, partnership, trust, or any other foreign entity), an NDA is obtained prior to receipt transfer of any NASA export-controlled items (commodities, software technical data, technology, defense services or technical assistance software).

3.4 License Requirements

The procedures for determining license requirements are stated in Chapters 4 and 5 of this NPR for exports under ITAR and EAR jurisdictions, respectively. It is possible that certain exemptions and exceptions may apply that permit an export without the need of a license. These exemptions and exceptions are discussed in Sections 4.4 through 5.2.

3.5 Technology Transfer Control Plans (TTCP)

3.5.1 A TTCP is a document, intended to serve as an aid and a guide to program and project managers, as well as other NASA officials and contractors, involved in an international activity. The TTCP responds to four fundamental sets of questions that NASA officials and contractors working with foreign nationals in a NASA program or project should ask:

- a. What items (commodities, software, technical data, technology) am I working with that are subject to export control?
- b. What foreign persons (and what nations) am I working with?
- c. What items (commodities, software, technical data, technology) do I need to provide to those foreign persons, according to the agreement or contract governing this activity? Which items are export-controlled and require my protection?
- d. How do I properly provide export-controlled items (commodities, software, technical data, technology) to those foreign persons with whom I am working?

3.5.2 If a NASA program or project will not export software or hardware and will disclose only publicly available information to all participating foreign persons, a TTCP would not be necessary or appropriate. However, if a NASA activity will export, transfer or disclose export-controlled items (commodities, software, technical data, technology, defense services, and/or technical assistance) to a foreign person, then a TTCP is a useful tool to ensure that all persons participating in the activity

understand what export-controlled items are involved, what foreign persons are involved, what export-controlled items NASA provides to those foreign persons under the terms and conditions of the cooperation, and how those items will be transferred to those foreign persons (including the means of transfer and appropriate markings, as required by the governing international agreement or contract). A TTCP is recommended for all such NASA international cooperation.

NASA program and project managers should consult with their CEAs, or the HEA, in the development of TTCPs for their programs that involve foreign participation and exports. A sample TTCP is in NAI 2190.1. NASA program and project managers are also encouraged to consult with their Center Chief Patent Counsel, Software Release Authority, and the Innovative Technology Transfer Partnership (ITTP) Program when developing a TTCP.

3.6 Recordkeeping

3.6.1 All export control records are maintained and destroyed in accordance with NPR 1441.1, schedule 2/7.5. The CEA and HEA will keep relevant export license documents and consult with individual programs and project managers on other export control records that should be maintained with the program or project. Program and project managers should keep export control records related to their programs/projects until five years after the items are disposed of and removed from NASA property records.

3.6.2 The EAR requires that records be maintained for all exports or transfers of items on the CCL for a period of at least five years beyond the expiration date of the license. Records are also maintained when using License Exceptions or EAR-99/NLR.

3.6.3 The ITAR likewise requires that records be maintained for all exports or transfers and imports of items on the USML for a period of five years from the expiration of the license. Records must also be maintained when using license exemptions.

3.6.4 The statute of limitations for criminal actions under the 50 U.S.C §§ 2401 (EAA) and the 22 U.S.C §§ 2778 (AECA) is five years. Therefore, all export control records are retained for no less than five years after the transfer or expiration of the license. BIS, DDTC, and the Department of Homeland Security may inspect records at any time. Records to be retained include the following in original or copy form:

- a. Shipping documents (e.g., GBL's and AES/SED's).
- b. Validated licenses (e.g. BIS-748P, DDTC Form DSP-5)
- c. Letters to NASA contractors by COs or their representatives authorizing the use of export license exceptions or exemptions.
- d. Classification determinations by NASA, BIS, or DDTC.
- e. Records other than AES/SEDs regarding the use of export license exceptions or exemptions, where appropriate (e.g., HEA/CEA authorization transmittal letters).

3.7 Reporting

3.7.1 When preparing statements of work and data deliverable requirements, program and project

managers shall ensure that the following requirements are provided to the CO so that they may be included in solicitations, contracts, and grants:

- a. Requirement for a plan identifying export licenses required for performance and exemptions and exceptions that will be used.
 - b. Requirement for a status report of licenses obtained, including copies of licenses.
 - c. Requirement for a status report of exports effected against those licenses, including copies of AES filings, commercial invoice documents, and other related shipping documents.
 - d. Requirement that these reports will be delivered to the CO for distribution to the program or project manager, and to the CEA of the relevant NASA Center or the HEA at NASA Headquarters.
- 3.7.2. NASA civil servant and contractors that are recipients of HEA or CEA transmittal letters that provide export authorization instructions, provisions, and conditions, shall comply with any reporting requirements therein, to facilitate regulatory compliance and accountability measures.

3.8 Information Security and Electronic Transmission

Ensure that the confidentiality and integrity of export-controlled information is protected during storage, processing, and transmission/dissemination. To the maximum extent practicable and when feasible, ensure that the confidentiality and integrity of export-controlled information exchanged over the Internet is properly protected by use of encryption and proper marking as specified in NAI 2190.1.

Chapter 4. International Traffic in Arms Regulations (ITAR) Procedures

4.1 General

4.1.1 In general, articles and services deemed to be defense articles and defense services, and so designated by the USML, are subject to the ITAR. Launch vehicles, spacecraft, and satellites are on the USML. Designations of defense articles are made by the DoS, with the concurrence of the DoD. For more information, refer to the ITAR.

4.1.2 The USML of the ITAR contains 21 generally described categories of controlled commodities, technical data, and defense services subject to the ITAR. Two categories particularly relevant to NASA activities are: Category IV-Launch Vehicles, Guided Missiles, Ballistic Missiles, Rockets, Torpedoes, Bombs and Mines; and Category XV-Spacecraft Systems and Associated Equipment.

4.1.3 Any person who engages in the United States in the business of either manufacturing or exporting defense articles or furnishing defense services is required to register with the DoS DDTC. Any person who intends to export or to import temporarily a defense article will obtain the approval of DDTC prior to the export or temporary import, unless the activity qualifies for an Exemption (See paragraph 4.3).

4.2 Imports

Notably, unlike the EAR, the ITAR contains provisions governing certain imports of defense articles, including license requirements and License Exemptions. In most cases, temporary imports of USML-listed defense articles by NASA are eligible for ITAR License Exemptions. Permanent imports by NASA of USML-listed defense articles are regulated by the Department of the Homeland Security, Bureau of Alcohol, Tobacco, Firearms and Explosives; such permanent imports do not require a license. See 27 CFR § 447.53.

4.3 Procedures for Determining ITAR License Requirements and License Exemption Eligibility

4.3.1 Procedures are delineated in the following decision tree:

a. To determine items License Exemption eligibility under the ITAR, first classify the item on the USML and review the Exemptions listed below. If any Exemption applies, a license is not required, but the exporter may have to file or make an entry in AES and other documents, in accordance with the ITAR.

b. ITAR License Exemptions may not be used to export any items to Proscribed Countries or to nationals of Proscribed Countries. Prohibitions may be due to United Nations Security Council embargoes, Secretary of State determinations that certain countries have repeatedly provided support for acts of international terrorism, or whenever an export would not otherwise be in furtherance of world peace and the security and foreign policy of the United States. Comprehensive arms

embargoes are normally published by the State Department in the Federal Register.

c. If an Exemption is not available for a proposed export, an ITAR export license should be obtained. DDTC provides three ways to submit license requests, but electronic submission through D-Trade is required for most license requests. The following forms are appropriate for items on the USML:

- (1) For temporary exports and transfers of unclassified items, use Form DSP-73.
- (2) For permanent exports and transfers of unclassified items, use Form DSP-5. Form DSP-83 may be required in addition to Form DSP-5 for certain Significant Military Equipment (SME) exports.
- (3) For exports and transfers of all classified items, use Form DSP-85.
- (4) For temporary imports of unclassified items, use Form DSP-61.

4.3.2 All ITAR license requests and other relevant license application information are sent through the CEA to the HEA at NASA Headquarters for submission of licenses.

4.4 License Exemptions

4.4.1 Numerous special conditions may exist that might permit the use of an ITAR License Exemption. Exemptions may apply due to the nature of the defense article or defense service, the destination, or the status of the exporting entity (i.e., U.S. Government agencies enjoy more permissive treatment under the ITAR than private companies). The details for Exemptions are found in the ITAR. Generally, any use of an ITAR License Exemption requires an international agreement or contract, as well as coordination with the CEA or HEA.

4.4.2 Following is a summary of License Exemptions found in the ITAR that are relevant to NASA activities:

- a. Publicly Available Information about Defense Articles. May be used for exports of publicly available information about defense articles. This Exemption is applicable to information approved by NASA for public release in any form. It does not require that the information be published in order to qualify for the Exemption.
- b. Technical Data Returned to Sender. May be used for exports of technical data being returned to the original source of import.
- c. Exports by or for U.S. Government Agencies. Temporary import or temporary export of any defense article, including technical data or the performance of a defense service, by or for NASA:
 - (1) For NASA's official use or,
 - (2) For carrying out a NASA cooperative program.
 - (3) The Exemption applies only when all aspects of a transaction (export, carriage, and delivery abroad) are effected by a U.S. Government agency or when the export is covered by a GBL. DDTC approval will be obtained before defense articles previously exported pursuant to this Exemption are permanently transferred, unless the defense articles have been rendered useless for military purposes beyond the possibility of restoration. Note: For purposes of this Exemption, defense articles exported for incorporation into a foreign launch vehicle or for use on a foreign launch vehicle or

satellite that is to be launched from a foreign country are permanent exports.

d. Imports and Exports for Use by U.S. Government agency abroad. Export or temporary import of defense articles, including technical data and performance of a defense service, for end use by a U.S. Government agency in a foreign country, if:

(1) The export or temporary import is pursuant to a contract with NASA or NASA-written direction.

(2) The end user in the foreign country is a U.S. Government agency or facility, and the defense articles or technical data will not be transferred to any foreign person.

(3) The urgency of the U.S. Government requirement is such that the appropriate export license or GBL could not have been obtained in a timely manner.

e. Operation Technical Data Exports for Lawfully Exported Articles. Exports of technical data in the form of basic operations, maintenance, and training information relating to a defense article lawfully exported or authorized for export to the same recipient.

f. Technical Data Exports Directed by NASA. Exports of technical data in furtherance of a contract between the exporter and NASA, where the contract provides for the export of the data and the data does not disclose the details of design, development, production, or manufacture of any defense article.

g. Plant Visits. Disclosures to Foreign Persons of unclassified technical data during the course of a plant visit approved by NASA, provided the technical data does not contain information in excess of that approved for disclosure and does not include information required for design, development, production, or manufacture of a defense article.

h. Exports of Parts, Components, and Models. Exports of parts and components when the total value does not exceed \$500 and parts are exported to support a defense article previously authorized for export, to a previously approved end user, and not to be used to enhance the capability of the defense article. Also, permits export of unclassified models or mock ups of defense articles, provided they are inoperable, do not reveal any detailed design, development, production, or manufacturing technical data, and do not contain USML-listed components.

i. Canadian Exemption. Most temporary imports from (and subsequent reexports to) Canada of defense articles are eligible for this Exemption. Certain limited exports of defense articles and defense services to Canada and Canadian nationals are also permitted, subject to specific agreement and reporting requirements. This exemption specifically excludes items under Category XV of the ITAR.

j. Temporary Imports. Temporary import for up to four years (and subsequent reexport to sending country) of unclassified U.S.-origin defense items (and items manufactured abroad with U.S. Government approval) for items serviced, inspected, tested, calibrated, repaired, or imported for the purpose of exhibition in the U.S.

k. Technical Data Authorized by Written DDTC Waiver. Exports of technical data for which the exporter, pursuant to an agreement with NASA, requires such exports, has been granted an Exemption in writing by DDTC. This Exemption will normally be granted only if the arrangement directly implements an international agreement to which the United States is a party and if multiple exports are contemplated.

Chapter 5. Export Administration Regulations (EAR) Procedures

5.1 General

5.1.1 In general, all dual-use items in the U.S. or moving in transit through the U.S. are subject to the EAR. An exception to this is those items that are exclusively controlled by other departments or agencies of the U.S. Government (such as the DoS for items subject to the ITAR) and such technology or software that are in the public domain. For more information and greater detail about the scope of these regulations, refer to the EAR.

5.1.2 Once it is determined that the item or activity is subject to the EAR, it is classified according to the CCL. The general characteristics of the item will determine its appropriate category. When the item has been classified into one of the categories, its particular characteristics and functions can be matched to a specific ECCN. The CCL contains 10 categories, 0 thru 9; each category is subdivided into five groups designated by letters A through E. The ECCN consists of a set of digits and a letter, as follows:

a. Each ECCN entry identifies the type of, and reason for, control associated with the item and under what conditions a License Exception may be granted. The first digit identifies the general category; the letter immediately following identifies under which of the five groups the item is listed. The second digit differentiates individual entries by identifying the type of controls associated with the items contained in the entry. The second or third digit serves to differentiate between multilateral and unilateral export controls. For example, in ECCN 9A004, the "9" represents "Propulsion Systems, Space Vehicles, and Related Equipment." The "A" represents "Systems, Equipment, and Components," and the "00" represents the reason for control as "National Security." The last digit, "4," represents the sequential location in the category.

b. If a commodity or technology under the jurisdiction of the EAR is not described under an ECCN on the CCL, it is designated "EAR-99," which describes items subject to the EAR, but not specifically listed on the CCL. Generally, EAR-99 items are controlled at the lowest level and could be exported without a license or a specific License Exception to any destination except embargoed countries or countries designated by the Secretary of State as sponsors of terrorism.

c. If an item or technology is subject to the scope of the EAR, the "Ten General Prohibitions" listed in the EAR will be considered to ensure that none of those prohibitions applies.

5.1.3 Procedures for determining EAR license or License Exception eligibility are delineated in in NAI 2190.1:

a. Having consulted the CCL and classified the item to be exported under an ECCN, this decision tree will lead to a determination as to whether a license is required to export or reexport the item to specific destination. If applicable, check to see whether a valid export license currently exists for the proposed export, against which the export may be properly effected. 15 CFR pt. 738.4 gives more detailed guidance, as well as the Country Chart. Note: Publicly available technical data and software are generally exportable to all destinations, except sanctioned countries

b. Under the entry heading "License Requirements" on the CCL, in each ECCN Description, reasons

for control are identified. Also in each ECCN, certain CCL-based License Exceptions may be listed for that entry.

c. With each Reason for Control, there is an applicable Country Chart identifier noted. It is now necessary to consult the Country Chart, locate the country of destination, and determine whether an "X" is marked in the cell under any of the associated Reasons for Control. If no "X" appears in the relevant column for the destination country, then No License is Required (NLR), and the export may be effected by simply marking "NLR" on the AES/SED, once all appropriate screens (See Section 5.3 of this NPR) and red flags (See Section 3.3 of this NPR) above have been reviewed.

d. If an "X" appears in the relevant column for the country of destination, a license is required unless a License Exception applies (see License Exceptions, below). The appropriate application form for exports and transfers is BIS Form 748P.

e. Refer all license requirements to the HEA through your CEA with other relevant license application information.

5.2 License Exceptions

5.2.1 A "License Exception" is an authorization that allows the export or reexport, under stated conditions, without an IVL. The EAR describes License Exceptions and provides detailed instructions for Exceptions and their restrictions. Several EAR License Exceptions, are discussed in Section 5.2.4, as they are the License Exceptions most commonly used by NASA.

Note: License Exceptions may not be used when the export is prohibited by a Denial Order; when the export would support proliferation activities; when the export would violate terms and conditions of a license or License Exception; or when the exporter has knowledge that a violation of law will occur in the export. Additionally, consistent with the policies and provisions of Export Administration Act, no License Exceptions may be used to export items controlled for Missile Technology (MT) reasons on the CCL.

5.2.2 Because most EAR License Exceptions require a written assurance by the recipient (e.g., BIS Form 711), an international agreement or contract is normally required for use of any License Exception.

5.2.3 Although License Exceptions permit the export of items without a license, there are requirements for filing AES documentation. Record the correct License Exception symbol and the correct ECCN (e.g., 4A003, 5A002) on the AES documentation entry for all shipments of items exported under a License Exception. Use of a License Exception requires approval of the CEA or HEA.

5.3 Screens

Foreign partners and end-users of NASA exports will be screened for nuclear proliferation concerns, missile proliferation concerns, and chemical-biological proliferation concerns. Refer to the EAR for missile and nuclear screens and for destinations of chemical-biological weapons proliferation concern.

Chapter 6. NASA Export Control Program Education and Training

6.1 General

6.1.1 It is incumbent on the HEA and each CEA to maintain a working knowledge of current ITAR and EAR provisions and restrictions that are applicable to NASA programs. This includes:

- a. Receiving and reviewing appropriate publications for revisions to the ITAR and EAR.
- b. Attending at least one export control training seminar annually.

6.2 Training Program

6.2.1 The HEA and HEC shall establish and conduct an export control training program for CEAs, and CECs.

6.2.2 At least annually, the HEA shall:

- a. Conduct or arrange training for NASA officials, including CEA's, CEC's, program and project managers, TOs, and others on issues and developments in export controls that affect NASA's international activities.
- b. Consult periodically among the HEC, CEAs, CECs, program and project managers, and other concerned NASA officials to determine where the NASA Export Control Program may be improved and whether additional comprehensive training is warranted.
- c. Develop and maintain export control training modules on the NASA SATERN site.

Chapter 7. NASA Export Control Program Auditing

7.1 Purpose

The purpose of the NASA Export Control Program Annual Audit is to ensure adequacy of the overall NASA Export Control Program and verify, via sampling, that required screening and licensing procedures are regularly followed and that required documents are maintained in compliance with the requirements of the EAR and the ITAR. This includes a review to ensure that appropriate records of all exports or transfers effected in support of NASA cooperative international programs are maintained in accordance with relevant regulations and NASA policies.

7.2 Auditor Selection

In accordance with NPD 2190.1, each Center Director shall designate a qualified individual as an ECA to annually review the operation of the NASA Export Control Program at that Center for the previous calendar year. The individual selected by the Center Director to serve as the Center ECA to perform the annual audit should have received audit training and have previous auditing or inspection experience. At a minimum, the appointed auditors should have participated in an ISO 9000 internal auditor course or other comparable auditor training. Individuals without appropriate training should not be selected, except in exceptional circumstances. The HEA will transmit audit guidance to each ECA in early January of each year. Therefore, Center Directors should make ECA appointments and inform the HEA of such appointments, as early in January of each year as practicable.

7.3 Auditor Duties and Responsibilities

7.3.1 Each Export Control Auditor (ECA) shall:

- a. Understand the tasks required in performing the audit (e.g., conducting interviews, random sampling of international projects conducted at the NASA Center, reviewing policy, reviewing export and shipping documents, developing recommendations, and preparing the final report).
- b. Have access to and a basic knowledge of the ITAR, EAR, and NASA Export Control Program.
- c. Be independent, motivated, and interested in performing the Export Control Auditor function.
- d. Be available to complete the task in the time allotted.
- e. Have complete access to the data and parties involved.
- f. Audit the Center export control function, including all export control activities and major programs that engage in exports.
- g. Determine if support contractors effecting NASA licenses, or exporting at NASA direction, comply with the relevant regulations and recordkeeping requirements.

- h. Use the Audit Module developed each year by the HEA as a tool in conducting the audit, and review export-related files; examine Center documents for effecting exports under NASA obtained export licenses; and examine a sampling of the documentation (e.g., AES/SEDs, and invoices) for other exports, paying particular attention to the items exported and the stated authority for the export.
- i. Prepare an audit report to the Center Director and CEA that includes a description of the review process undertaken, the findings, and any recommendations or suggestions for improvement. The ECA's audit report is provided each year as directed by the HEA.
- j. Maintain documentation supporting the audit performed.

7.4 Final Report

The CEA shall review the ECA's report and provide a written response, including concurrence, partial concurrence, or non-concurrence with any findings and recommendations. The CEA will forward the final report, together with comments, recommendations, and actions taken or pending to the HEA 30 days from receipt of the final report each year.

Chapter 8. Questions of Compliance and Violations

8.1 General

NASA is a responsible exporter. Noncompliance with U.S. export control laws and regulations and NASA's Export Control Program could result in schedule and cost overruns, criminal, civil, or administrative penalties against both Government officials and private contractors, and harm to the national security or foreign policy of the United States. It is every employee's responsibility to be aware of the export control laws and regulations and, whenever in doubt, to seek assistance when effecting transfers to foreign parties.

8.2 Voluntary Disclosure

8.2.1 Both the ITAR and the EAR require voluntary self-disclosure if an exporter finds errors or noncompliance in export activities, even if errors were inadvertent. The voluntary disclosure of all the facts and circumstances will serve as a mitigating factor in determining what administrative sanctions or penalties will be sought. Voluntary disclosures can be considered a mitigating factor when they are received by DDTC (for ITAR violations), or the Office of Export Enforcement (for EAR violations), prior to the U.S. Government receiving similar information from another source and commencing an investigation or inquiry that involves that information. Refer to the ITAR and the EAR for specific guidance on voluntary disclosure processes at DDTC and BIS.

8.2.2 Any NASA employee or NASA contractor concerned about questions of export compliance or impropriety in the area of export control should report those concerns to the CEA or CEC at the Center, or to the HEA or HEC at NASA Headquarters, in a timely manner. The appropriate CEA and HEA will immediately gather all the pertinent information, make an initial determination as to whether the subject activity should be suspended, review the facts, and determine if a voluntary disclosure is warranted. All NASA voluntary disclosures will be submitted to the appropriate U.S. Government regulatory and enforcement agencies through the HEA at NASA Headquarters' Office of International and Interagency Relations. Further guidance on voluntary disclosures is provided in NAI 2190.1.

8.2.3 Errors in effecting exports or making transfers should not be concealed for any reason. It is better to uncover errors or mistakes, investigate, and understand the causes, and then make process changes to preclude future reoccurrence.

8.3 Violations

8.3.1 The ITAR lists U.S. criminal statutes that address violations of the ITAR. The EAR provides information on civil and criminal penalties for violations of the EAR.

8.3.2 All suspected criminal violations in the NASA Export Control Program are to be reported immediately to the HEA, who will consult with the IG and appropriate regulatory and enforcement agencies.

Appendix A. Definitions

ACEA refers to Assistant or Alternate Center Export Administrator. The assistant is a full-time export control position while the alternate is a part-time position.

AES refers to the system, including AESDirect, for collecting electronic export information (or any successor document) from persons exporting goods from the United States, Puerto Rico, or the U.S. Virgin Islands; between Puerto Rico and the United States; and to the U.S. Virgin Islands from the United States or Puerto Rico.

AO or Advisory Opinion is a U.S. Department of State (DoS) term used to reference official DoS correspondence regarding export licensing regulations and policy issues.

BIS refers to the Bureau of Industry and Security, a component of the U.S. Department of Commerce (DoC), which administers the Export Administration Regulations (EAR).

BIS Form 748P is the multipurpose application form for a license to export items or classify items subject to the licensing authority of BIS. Export license application forms are electronically submitted to BIS by the NASA Export Administrator at Headquarters.

CCL or Commerce Control List refers to a list that includes commodities, software, and technology subject to the authority of BIS. The CCL does not include those items exclusively controlled for export by another department or agency of the U.S. Government; e.g., DoS or Department of Energy (DoE). On the CCL, there are ten general categories of items; each category is subdivided into five descriptive groups, designated by letters A through E.

CEA or Center Export Administrator is the senior-level official appointed by the Center Director to implement and manage the NASA Export Control Program at each Center.

CEC or Center Export Counsel is the attorney appointed by the Center Chief Counsel to provide legal guidance to the CEA in NASA export control matters.

CFIUS or Committee on Foreign Investment in the United States is an interagency committee chaired by the Secretary of Treasury that implements the Exon-Florio foreign investment review legislation. CFIUS seeks to serve U.S. investment policy through thorough reviews that protect national security while maintaining the credibility of our open investment policy.

CIV is a CCL-based License Exception in the EAR, 15 CFR § 740.5. CIV authorizes exports and reexports controlled to the ultimate destination for national security reasons only, and if identified by "CIV Yes" on the CCL, provided the items are destined to civil end users for civil end uses in specified countries (generally, the nations of the former Soviet Union and certain other countries). Use of EAR Exceptions for exports should have the concurrence of the CEA or the HEA.

Classification is the process for determining the relevant entry in the CCL for commodities or technologies that fall under the jurisdiction of the EAR. Classification takes place after the jurisdiction of the item has been determined. Items under the jurisdiction of the EAR can be found on the CCL, and items under the jurisdiction of the DoS can be found on the USML. Individuals are responsible for ensuring that commodities are correctly classified prior to transfer to foreign persons or locations. However, NASA can request DoC assistance in classifying an item on the CCL. NASA classification requests are coordinated with, and submitted by, the NASA HEA.

CJ or Commodity Jurisdiction refers to the DoS authority to determine if an article or service is under the jurisdiction of the DoS. A CJ may also be used for consideration of a re-designation of an article or service currently covered by the USML. NASA CJ requests are coordinated with, and submitted by, the HEA.

Commodity refers to any article, material, or supply except technology and software.

Controls refers to possible reasons for export prohibitions or restrictions on a commodity, software, or technology. In the context of the EAR, reasons for export control include national security, foreign policy, antiterrorism, crime control, regional stability, international sanctions, and nonproliferation.

Consignee is a person, organization, or entity that is a recipient of an export.

Consignor is a person, organization, or entity that provides or effects an export.

DAA or NASA Scientific and Technical Document Availability Authorization refers to NASA Form 1676, used for all NASA-generated or -funded scientific and technical information that is to be released outside NASA. See NPR 2200.2, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information. The DAA is also available electronically and referred to as the Electronic Document Availability Authorization (EDAA)

DCS or Destination Control Statement is a statement made by the exporter or consignor that will be entered on the commercial invoice document that accompanies the shipment to its ultimate consignee or end user abroad. It should read: "These items are controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations."

The DCS relates directly to the "Marking Statement" which is discussed in NASA international agreements that provide for exports of items in NASA programs where, in most cases, the international agreement prescribes the content of the DCS.

Defense Service means: (1)The furnishing of assistance (including training) to foreign persons, whether in the United States or abroad in the design, development, engineering, manufacture, production, assembly, testing, repair, maintenance, modification, operation, demilitarization, destruction, processing or use of defense articles; (2)The furnishing to foreign persons of any technical data, whether in the United States or abroad; or (3) Military training of foreign units and forces, regular and irregular, including formal or informal instruction of foreign persons in the United States or abroad or by correspondence courses, technical, educational, or information publications and media of all kinds, training aid, orientation, training exercise, and military advice.

DSP-5 is the DoS application form for a license to permanently export unclassified defense articles and related unclassified technical data controlled by the ITAR and subject to the licensing authority of the DoS. Generally, NASA does not seek licenses for exports of technical data or defense services. All NASA export license applications are coordinated with and submitted by the HEA.

DDTC refers to the Directorate of Defense Trade Controls, a component of the DoS, which

administers the ITAR.

Dual-use is a term used to distinguish the types of items covered by the EAR from those that are covered by the ITAR. Dual-use refers to items that have both commercial and military or proliferation applications. While this term is used informally to describe items that are subject to the EAR, purely commercial items and certain munitions items listed on the Wassenaar Arrangement Munitions List (WAML) or the Missile Technology Control Regime Annex are also subject to the EAR (see § 734.2(a) of the EAR).

EAR or Export Administration Regulations, 15 CFR §§ 730-774, is the set of regulations that control the export of commercial and dual-use items that are designed for commercial use, but may have military use as well. The BIS within the DoC has the responsibility for the EAR under the Export Administration Act of 1979, as amended (50 U.S.C. app. §§ 2401, et seq.).

EAR-99 is an EAR classification used to describe an item (commodity, software, or technology) that is subject to the EAR, but that is not specifically identified on the CCL. EAR-99 indicates the lowest level of control and is eligible for export to most countries (excluding terrorist-supporting and embargoed nations), using the designation NLR. See 15 CFR § 740, Supp.1, Country Group E.

ECA or Export Control Auditor refers to NASA-appointed internal auditors that perform the annual audit of NASA ECP.

ECCN or Export Control Classification Number is related to the classification process. On the CCL, there are ten categories of items, 0 through 9; each category is subdivided into five descriptive groups designated by letters A through E. The ECCN consists of a set of digits and a letter. The first digit identifies the general category (e.g., 9 - Propulsion Systems, Space Vehicles, and Related Equipment); the letter immediately following identifies in which of the five descriptive groups the item is listed (e.g., A - Equipment, Assemblies, and Components). The following digits differentiate individual entries by identifying the type of controls associated with the items contained in the entry (e.g., 0 - National Security reasons). The second and/or third digits serve to differentiate between multilateral and unilateral entries. Thus, in ECCN 9A004, the 9 represents Propulsion Systems, Space Vehicles, and Related Equipment; the A represents Systems, Equipment, and Components, and the 00 represents both the reason for control as National Security and is subject to multilateral control. The last digit, 4, simply represents the sequential location in the category.

ECP or Export Control Program refers to NASA Export Control Program as specified in NPD 2190.1.

ECR or Export Control Representative is an employee in the directorate or program organization that may be appointed as an Export Control Representative and is responsible for facilitating and coordinating resolution of export control issues with the CEA. The ECR maintains a working knowledge of the export control laws and regulations and can assist the directorate or program with compliance and development of Technology Transfer Control Plans. At some centers, the export control representative positions are referred to as a Center Export Representative (CER) or Export Control Point of Contact (EC-POC)

ENC is a License Exception under the EAR, 15 CFR § 740.17. ENC authorizes the export of certain encryption items and information security test, inspection, and production equipment. All requirements of the ENC Exception are reviewed and complied with before its use can be authorized. Use of EAR Exceptions for exports should have the concurrence of the CEA or the HEA.

End-User is the designated final entity and destination of the export indicated on an export license. This is the person abroad that receives and ultimately uses the exported or reported items. The end-user is not a forwarding agent or intermediary, but may be the purchaser or ultimate consignee. The foreign government partner signatory to the international agreement or Memorandum of Understanding with NASA is usually the designated end user on a NASA export license application.

Exception is an EAR authorization that allows an export or reexport of an otherwise controlled item to proceed without a license, provided that certain specified conditions are met. Exception is a BIS term and applies only to items under the jurisdiction of the EAR. Use of Exceptions for exports should have the concurrence of the CEA or the HEA. See 15 CFR, Part 740 for a description of all EAR License Exceptions.

Exemption is an ITAR authorization from DDTC for exports of unclassified defense articles and defense services without a license under certain specific provisions or limitations. Exemptions can be found in the ITAR. All conditions of an Exemption will be met before use is authorized. Use of Exemptions for exports should have the concurrence of the CEA or the HEA and there are recordkeeping and reporting requirements to HEA. See 22 CFR Parts 123, 125, and 126 for a description of the most relevant ITAR License Exemptions. NASA Federal Acquisition Regulation 1852.225-70 notes the requirement for a NASA letter authorizing contractor use of 125.4(b) (3).

Export is the transfer of anything to a foreign person or foreign destination by any means, anywhere, anytime. An export can be any shipment, mail, transfer, or transmission of commodities, technology, software, defense services, or technical assistance, regardless whether it occurs in the United States, overseas, or in space, including:

- a. Transfer to any person by physical, electronic, oral, or visual means, with the knowledge or intent that the items will be shipped, transferred, or transmitted outside of the United States.
- b. Disclosure of technical data to a foreign person by physical, electronic, oral, or visual means within or outside of the United States (disclosure to U.S. nationals representing foreign interests are not exports unless there is knowledge or reason to know that the technical data will be further disclosed to a foreign party).
- c. Transfer to a foreign country, embassy, or affiliate.
- d. Transfer of control over a satellite or instrument on-orbit.

Foreign Person, for purposes of export control regulation, is any person who is not a U.S. citizen, permanent resident alien, or Protected Individual of the United States (See 22 CFR § 120.16). Note: Under NASA security policies, a foreign national is any person who is not a U.S. citizen, including lawful permanent residents (i.e., holders of green cards) or persons admitted to the U.S. with refugee status (See NPR 1600.3).

Foreign Visit refers to a visit by a foreign person to any NASA facility, including NASA Headquarters, NASA Centers, JPL, or other Component Facilities. NPR 1600.4 describes the procedures and guidelines for review and approval of all visits to NASA facilities by foreign persons.

Fundamental Research means research in science, engineering, or mathematics, the results of which ordinarily are published and shared broadly within the research community, and for which the researchers have not accepted restrictions for proprietary or national security reasons.

GBL or Government Bill of Lading is an accountable, U.S. Government form used to document and facilitate exports of commodities on behalf of the U.S. Government. When a GBL is used to effect an export, the U.S. Government agency authorizing the use of the GBL is the exporter.

GBS is a CCL-based License Exception in the EAR, 15 CFR § 740.4. GBS authorizes exports to most free-world countries of certain commodities controlled for national security reasons only. All requirements of the GBS Exception are reviewed and complied with before its use can be authorized. Use of Exceptions for exports should be coordinated with the CEA or the HEA.

GOV is a License Exception in the EAR, 15 CFR § 740.11. GOV authorizes exports to and from U.S. Government agencies or personnel. It also permits exports to certain foreign government agencies. All requirements of the GOV Exception are reviewed and complied with before its use can be authorized. Use of Exceptions for exports should have the concurrence of the CEA or the HEA.

HEA is the NASA Headquarters Export Administrator. The HEA is appointed by the Associate Administrator for International and Interagency Relations and is responsible for:

- a. Ensuring the compliance of all NASA program activities and exports with U.S. export control laws and regulations and this NPR.
- b. Serving as NASA's Empowered Official for purposes of 22 CFR § 120.25 and 15 CFR § 758.1(a), in certifying and approving all NASA export license applications.
- c. Serving as the Headquarters point of contact with CEAs.
- d. Serving as the Agency's interagency interface for export control matters with the DoS and DoC, and others, for all export licensing matters.

HEC or Headquarters Export Counsel is the attorney appointed by the NASA General Counsel to provide legal guidance to the HEA in NASA export control matters.

ICE refers to the Immigration and Customs Enforcement, a component of the U.S. Department of Homeland Security

International Agreement refers to the approved agreement document between NASA and a foreign entity. An international agreement can take the form of a letter agreement, a Memorandum of Understanding, or similar instruments. Unless otherwise delegated by the Associate Administrator for International and Interagency Relations, international agreements are signed by authorized officials in the Office of International and Interagency Relations at NASA Headquarters. See NPD 1050.1.

ITAR or International Traffic in Arms Regulations is the set of regulations that control the export and temporary import of defense articles and services. The ITAR (22 CFR §§ 120-130) is promulgated under the authority of the Arms Export Control Act (22 USC §§ 2778, et seq.). The authority for these controls has been delegated to the Secretary of State by Executive Order 11958, as amended (42 Fed. Reg. 4311).

Item means commodities, software, and/or technology/technical data hardware

A license, is an authorization issued by the DoC or DoS for export, reexport, temporary import, or other regulated activity concerning export-controlled items. Licenses are used by the Department of Homeland Security's Immigration and Customs Enforcement (ICE) for enforcement purposes at the time of export.

LVS is a CCL-based License Exemption in the EAR, 15 CFR § 740.3. LVS authorizes the export in a single shipment of eligible commodities of limited value where identified on the CCL. All requirements of the LVS Exception are reviewed and complied with before its use can be authorized. Use of Exceptions for exports should have the concurrence of the CEA or the HEA.

Major non-NATO Ally or MNNA is a designation given by the U. S. Government to close allies who have strategic working relationships with U.S. armed forces, but are not members of the North Atlantic Treaty Organization (NATO). Current MNNA countries are: Argentina, Australia, Bahrain, Egypt, Israel, Japan, Jordan, Kuwait, Morocco, New Zealand, Pakistan, Philippines, South Korea, and Thailand.

Marking or marking statement refers to the export control notice that NASA places on export documents (e.g., GBL, notification for foreign recipient, inventory, or packing lists) for all exports of controlled commodities or technology. The international agreement governing the export will have a Technical Data and Goods Clause that indicates the marking statement requirement. It is important that all controlled technical data (including software) include a marking statement prior to transfer to the foreign party. A marking statement is similar to the Destination Control Statement (DCS) required in the EAR and discussed in DAA above. The typical marking statement for exports effected under international agreements would read, "This (item description) is subject to the export control laws and regulations of the United States of America and is being exported from the United States to (name of foreign recipient) in accordance with (cite international agreement or contract) and U.S. export laws and regulations and are to be used by (name of authorized foreign recipients) only for the purposes of fulfilling their responsibilities under (cite international agreement or contract) and is not be retransferred to any other entity without the prior written permission of NASA."

NATO (North Atlantic Treaty Organization) is a military alliance that currently consists of 28 member states from North America and Europe. Current NATO members are: Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey, United Kingdom, and the United States.

NLR or "No License Required" is an EAR term, which may be used as an export authorization for the shipment of items under varying circumstances. NLR may be used for either EAR99 items, or for items on the CCL that do not require a license for the destination in question, provided no General Prohibitions apply; NLR is also the symbol entered on the Electronic Export Information filing for the Automated Export System (AES) certifying that there is an authorization of "No License Required" for the export.

Publicly Available or "public domain" means information (including software) that is not subject to export control due to its unrestricted availability as follows: in open literature; available at any library to which the public has access; open seminar; fundamental basic and applied research where the resulting information is ordinarily published and shared broadly within the scientific community; educational information taught in catalog courses, including general scientific, mathematical, or engineering principles commonly taught in academic institutions; information contained in published patents or published patent applications; or basic marketing information on function or purpose or general system descriptions. It does not include research which is restricted for proprietary reasons, or which is subject to specific U.S. Government access and dissemination controls. Additionally, information or software which is proprietary to any party is not publicly available. Public Domain is a term similar to publicly available. The ITAR defines public domain in

22 CFR § 120.11. The EAR defines publicly available in 15 CFR Part 732.

Recordkeeping refers to the requirements for the maintenance of original records pertaining to export transactions for inspection by U.S. Government regulatory departments and agencies upon request. Recordkeeping requirements for the EAR are found at 15 CFR Part 762 and for the ITAR at 22 CFR Part 130.14 and reflected in NPR 1441.1 NASA Records Retention Schedules. Export records are to be kept for all exports 5 years beyond the expiration date of an export license or 5 years beyond use of a License Exception or Exemption.

Red Flag means any abnormal circumstance in a transaction that indicates that the export/transfer may be destined for an inappropriate end-use, end user, or destination. Examples may include requests for items that are inconsistent with the needs of the partner/project, requests for equipment configurations that are incompatible with the stated destination (e.g., 120 volts in a country with 220 volts), or other apparent irregularities. Always inquire and seek additional information if red flags are indicated. Refer to the EAR 15 CFR Part 732, Supplement 3.

RPL is a License Exception in the EAR, 15 CFR § 740.10. RPL authorizes exports associated with one-for-one replacement of parts or servicing and replacement of equipment. All requirements of the RPL Exception is reviewed and complied with before its use can be authorized. Use of Exceptions for exports will have the concurrence of the CEA or the HEA.

SED or Shipper's Export Declaration, is a joint Bureau of the Census/International Trade Administration document used for compiling the official U.S. export statistics and administering the requirements of the Export Administration Act as provided for in the Foreign Trade Statistics Regulations (15 CFR Part 30) and the EAR (15 CFR Parts 768-799). The SED is filed by the exporter with the Bureau of Immigration and Customs Enforcement at the port of exit from the United States. This form was replaced by the Automated Export System and is now only maintained as a record of export transactions.

STI refers to Scientific and Technical Information, which consists of the collected set of facts, analyses, and conclusions resulting from scientific, technical, and related engineering research and development efforts, both basic and applied. Information published in policy documents, such as NASA directives and NASA Technical, Engineering, or Safety Standards, or information published as a result of mishap investigations, are not considered STI. See NPR 2200.2 for further information.

Source Code means a representation or expression of one or more processes that may be transformed by a programming system or language, such as BASIC, FORTRAN, C++, Ada, JAVA and SQL (NPR 2210.1) into executable form ("object code"). Source code is any collection of statements or declarations written in some human-readable computer programming language.

Technical Assistance refers to defense service. A Technical Assistance Agreement is an ITAR licensing document required for the performance of a defense service or the disclosure of technical data.

Technical Data and Technology: Technical Data is an ITAR term, defined in the ITAR at 22 CFR § 120.10. It is defined as information required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of a defense article identified on the USML. Technology is an EAR term, defined in the EAR at 15 CFR Part 772. It is defined as specific information necessary for the development, production, or use of a product. The information takes the form of technical data or technical assistance. Controlled technology is further

described in the General Technology Note (15 CFR Part 774, Supp. 2). As with technical data, controlled technology does not include information which is publicly available. For the purposes of this NPR, the terms technical data and technology have the same general meaning.

TMP is a License Exception in the EAR, 15 CFR § 740.9. TMP authorizes various temporary exports; exports of items temporarily in the United States; and exports of beta test software. All requirements of the TMP Exception are reviewed and complied with before its use can be authorized. Use of Exceptions for exports should have the concurrence of the CEA or the HEA.

TSR is a CCL-based License Exception in the EAR, 15 CFR § 740.6. TSR permits exports of technology and software controlled for national security reasons only where identified on the CCL, provided the software or technology is destined to a free-world country. (See Country Group B, Supplement No. 1 to 15 CFR Part 740.) A written assurance is normally required from the consignee before exporting under TSR. All requirements of the TSR Exception are reviewed and complied with before its use can be authorized. Use of Exceptions for exports should have the concurrence of the CEA or the HEA.

TSU is a License Exception in the EAR, 15 CFR § 740.13. TSU authorizes exports of operation technology and software; software updates (bug fixes); "mass market" software subject to the General Software Note (15 CFR Part 774, Supp. 2); and encryption source code (and corresponding object code) that would be considered publicly available under 15 CFR § 734.3(b) (3). All requirements of the TSU Exception should be reviewed and complied with before its use can be authorized. Use of Exceptions for exports should have the concurrence of the CEA or the HEA.

TTCP or Technology Transfer Control Plan defines what technologies or technical data in a NASA program or project requires protection and what foreign access is permissible. It also assigns ECP requirements and responsibilities for programs or projects with foreign national participation. NASA international program activities should have a TTCP to follow when they involve exports or transfers of controlled technical data or hardware to international partners/foreign parties

USML or United States Munitions List identifies and enumerates classes of defense articles and defense services subject to the jurisdiction of the ITAR. The USML is found in the ITAR at 22 CFR, Part 121.

Voluntary Disclosure is self-disclosure of possible violations of export provisions by persons, firms, or organizations engaged in international transactions. Disclosures of export violations are required to be filed under the ITAR and are strongly encouraged under the EAR. The HEA will file any such voluntary disclosures concerning possible NASA export control violations with the appropriate agency. All suspected criminal violations in the NASA ECP are to be reported immediately to the HEA who will consult with the Office of the Inspector General and appropriate regulatory and enforcement agencies. NASA support contractors implementing NASA programs should report potential voluntary disclosure matters to the HEA in addition to taking other actions required under the EAR or ITAR.

Appendix B. References

- B.1 Exon-Florio Act, as amended, 50 U.S.C. app. § 2170.
- B.2 Export Administration Regulations, 15 CFR §§730-774
- B.3 International Traffic and Arms Regulations, 22 CFR §§ 120-130
- B.4 Foreign Contracts and International Agreements Clearances, 48 CFR subpt. 1825.70.
- B.5 Export Control, 48 CFR subpt. 1825.1103-70.
- B.6 Final Scientific and Technical Reports, 48 CFR subpt. 1852.235-73.
- B.7 Major Breach of Safety and Security Reporting, 48 CFR subpt. 1852.223-75.
- B.8 NPD 1051.1, Authority to Enter into Space Act Agreements.
- B.9 NPD 1360.2, Initiation and Development of International Cooperation in Space and Aeronautics Programs.
- B.10 NPD 1440.6, NASA Records Management.
- B.11 NID 1600-95, NASA Identity and Credential Management.
- B.12 NPR 1600.3, Personnel Security.
- B.13 NPR 1600.4, NASA Identity and Credential Management.
- B.14 NPD 2200.1, Management of NASA Scientific and Technical Information.
- B.15 NPR 2200.2, Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information.
- B.16 NPD 2800.1, Managing Information Technology.
- B.17 NPR 2800.1, Managing Information Technology.
- B.18 NPD 2810.1, NASA Information Security Policy.
- B.19 NPR 2810.1, Security of Information Technology.
- B.20 NPR 4200.1, NASA Equipment Management Procedural Requirements.
- B.21 NPD 4200.1, Equipment Management.
- B.22 NPR 4300.1, NASA Personal Property Disposal Procedural Requirements.
- B.23 NPR 5800.1, Grant and Cooperative Agreement Handbook (14 CFR 1260).
- B.24 NPR 6200.1, NASA Transportation and General Traffic Management.
- B.25 NPR 7120.5, NASA Space Flight Program and Project Management Requirements.
- B.26 NPR 7500.1, NASA Technology Commercialization Process.

B.27 NAI 1050-1, NASA Advisory Implementing Instruction, Space Act Agreements Guide.

B.28 Grant Information Circular GIC 07-02, Scientific and Technical Information, April 5, 2007.